What is claimed is:

1. A method of fabricating a thin film transistor comprising the steps of:

forming a gate electrode on an insulator substrate;

forming a gate insulator film over the insulator substrate and the gate electrode;

forming an amorphous silicon film on the gate insulator film;

irradiating laser light on a surface of the amorphous silicon film to heat the amorphous silicon film, thereby forming a polycrystalline silicon film; and

setting energy of the laser light such that a grain size of a first portion of the polycrystalline silicon film over the insulator substrate becomes equal to or greater than a grain size of a second portion of the polycrystalline silicon film over the gate electrode.

2. The method according to claim 1, further comprising a step of defining a source and a drain of the thin film transistor in the first portion and defining a channel of the thin film transistor in the second portion.

3. The method according to claim 2, wherein the step of setting the energy of the laser light includes the steps of:

setting a maximum energy of the laser light such that grain sizes of the drain and the source become substantially equal to a grain size of the channel; and

setting a minimum energy of the laser light to obtain a grain size of the channel enough to provide a desired device characteristic of the thin film transistor.

4. The method according to claim 3, wherein the grain size of the channel which is enough to provide the desired device characteristic of the thin film transistor lies in a range of about 500 Å to about 20000 Å.

5. The method according to claim 3, wherein the grain size of the channel which is enough to provide the desired device characteristic of the thin film transistor lies in a range of about 1500 Å to about 20000 Å.

6. The method according to claim 3, wherein the grain size of the channel which is enough to provide the desired device characteristic of the thin film transistor lies in a range of about 3000 Å to about 10000 Å.

7. A thin film transistor comprising an active layer including a polycrystalline silicon film where a drain, a source and a channel are defined, grain sizes of the drain and source being equal to or greater than a grain size of the channel.

8. A thin film transistor comprising:

an insulator substrate;

a gate electrode located on the insulator substrate;

an insulator film provided on the insulator substrate and the gate electrode; and

a polycrystalline silicon film located on the insulator film, a channel defined in a first portion of the polycrystalline silicon film over the gate electrode, a drain and a source defined in second and third portions of the polycrystalline silicon film over the insulator substrate, grain sizes of the drain and source being equal

to or greater than a grain size of the channel.

9. The thin film transistor according to claim 8, wherein the grain size of the channel is set large enough to provide a desired device characteristic of the thin film transistor.

10. The thin film transistor according to claim 9, wherein the grain size of the channel lies in a range of about 500 Å to about 20000 Å.

11. The thin film transistor according to claim 9, wherein the grain size of the channel lies in a range of about 1500 Å to about 20000 Å.

12. The thin film transistor according to claim 9, wherein the grain size of the channel lies in a range of about 3000 Å to about 10000 Å.

13. An active matrix type display apparatus comprising:

a plurality of pixels; and

a plurality of drive elements for respectively driving the plurality of pixels, each drive element including a thin film transistor, the thin film transistor having:

an insulator substrate;

a gate electrode located on the insulator substrate;

an insulator film provided on the insulator substrate and the gate electrode; and

a polycrystalline silicon film located on the

insulator film, a channel defined in a first portion of the polycrystalline silicon film over the gate electrode, a drain and a source defined in second and third portions of the polycrystalline silicon film over the insulator substrate, grain sizes of the drain and source being equal to or greater than a grain size of the channel.

14. The display apparatus according to claim 13, wherein the grain size of the channel is set large enough to provide a desired device characteristic of the thin film transistor.

15. The display apparatus according to claim 14, wherein the grain size of the channel lies in a range of about 500 Å to about 20000 Å.

16. The display apparatus according to claim 14, wherein the grain size of the channel lies in a range of about 1500 Å to about 20000 Å.

17. The display apparatus according to claim 14, wherein the grain size of the channel lies in a range of about 3000 Å to about 10000 Å.